



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Stephen B. Leonard et al.

Serial No.: 10/635,060

Filed: August 6, 2003

Title: DUAL ACTION TOILET RIM MOUNTED TOILET BOWL CLEANER

Art Unit: 3751

Examiner: Tuan N. Nguyen

## DECLARATION UNDER 37 C.F.R. 1.131

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

- I, Stephen B. Leonard, an inventor of the above-identified patent application, hereby declare as follows:
- 1. The invention specified in the attached claims, which I understand are those pending in this application, was reduced to practice in the United States prior to February 11, 2002.
- 2. This is evidenced by attached Exhibit A, an accurate photocopy of an Invention Disclosure (with dates blocked out) that was prepared and signed prior to February 11, 2002 in the United States. My signature is at the bottom of Page 1 of Exhibit A, which includes drawings and a description of the claimed invention.

3. I declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the above-identified application or any patent issuing thereon.

Respectfully submitted,

Dated: <u>August 30</u>, 2004

Stephen B. Leonard

## Claims Pending in U.S. Application No. 10/635,060

1. (Original) A dispensing device for using a flow of water during a toilet flush to dispense toilet bowl treatment preparations into a toilet bowl, the device comprising:

a bottle for holding a liquid;

a base for holding the bottle;

a wicking device supported by the base, the wicking device being suitable to convey the liquid from the bottle to a dispensing position within the flow of water during a toilet flush;

a container holding a dissolvable product, the container being configured to permit water from the flow of water to enter the container during a toilet flush, and the container including an opening configured to permit a mixture comprising water and dissolved product to be released from the container into the toilet bowl; and suspension means for suspending the base from a rim of the toilet bowl.

- 2. (Original) The dispensing device of claim 1, wherein the liquid comprises a surfactant.
- 3. (Original) The dispensing device of claim 1, wherein the liquid comprises a fragrance.
- 4. (Original) The dispensing device of claim 1, wherein the dissolvable product includes a bleaching agent or a chlorine releasing agent.

5. (Original) A dispensing device for using a flow of water during a toilet flush to dispense toilet bowl treatment preparations into a toilet bowl, the device comprising:

a bottle for holding a liquid, the bottle having a mouth and a closure for covering the mouth;

a base for holding the bottle, the base having a piercing post, the piercing post being suitable for opening the closure of the bottle;

a wicking device supported by the base, the wicking device being suitable to convey the liquid from the piercing post to a dispensing position within the flow of water during a toilet flush;

a container holding a dissolvable product, the container being configured to permit water from the flow of water to enter the container during a toilet flush, the container including a dispensing conduit configured to permit a mixture comprising water and dissolved product to be released from the container into the toilet bowl, the dispensing conduit being dimensioned such that a portion of the mixture is released into the toilet bowl after the toilet flush is complete; and

suspension means for suspending the base from a rim of the toilet bowl, wherein the dissolvable product comprises a solid including at least one component that is incompatible with at least one component of the liquid.

6. (Original) The dispensing device of claim 5, wherein the liquid comprises a surfactant.

- 7. (Original) The dispensing device of claim 5, wherein the liquid comprises a fragrance.
- 8. (Original) The dispensing device of claim 5, wherein the dissolvable product includes a bleaching agent or a chlorine releasing agent.
- 9. (Previously Presented) A dispensing device for using a flow of water during a toilet flush to dispense toilet bowl treatment preparations into a toilet bowl, the device comprising:
  - a bottle for holding a liquid;
  - a base for holding the bottle;
- a wicking device supported by the base, the wicking device being suitable to convey the liquid from the bottle to a dispensing position within the flow of water during a toilet flush;

a container attached at a bottom end of the base such that the container extends below the base, the container holding a dissolvable product, the container being configured to permit water from the flow of water to enter the container during a toilet flush, and the container including an opening configured to permit a mixture comprising water and dissolved product to be released from the container into the toilet bowl; and suspension means for suspending the base from a rim of the toilet bowl.

- 10. (Previously Presented) The dispensing device of claim 9, wherein the liquid comprises a surfactant.
- 11. (Previously Presented) The dispensing device of claim 9, wherein the liquid comprises a fragrance.
- 12. (Previously Presented) The dispensing device of claim 9, wherein the dissolvable product includes a bleaching agent or a chlorine releasing agent.
- 13. (Previously Presented) A dispensing device for using a flow of water during a toilet flush to dispense toilet bowl treatment preparations into a toilet bowl, the device comprising:

a bottle for holding a liquid, the bottle having a mouth and a closure for covering the mouth;

a base for holding the bottle, the base having a piercing post, the piercing post being suitable for opening the closure of the bottle;

a wicking device supported by the base, the wicking device being suitable to convey the liquid from the piercing post to a dispensing position within the flow of water during a toilet flush;

a container attached at a bottom end of the base such that the container extends below the base, the container holding a dissolvable product, the container being configured to permit water from the flow of water to enter the container during a toilet flush, the container including a dispensing conduit configured to permit a mixture

comprising water and dissolved product to be released from the container into the toilet bowl, the dispensing conduit being dimensioned such that a portion of the mixture is released into the toilet bowl after the toilet flush is complete; and

suspension means for suspending the base from a rim of the toilet bowl, wherein the dissolvable product comprises a solid including at least one component that is incompatible with at least one component of the liquid.

- 14. (Previously Presented) The dispensing device of claim 13, wherein the liquid comprises a surfactant.
- 15. (Previously Presented) The dispensing device of claim 13, wherein the liquid comprises a fragrance.
- 16. (Previously Presented) The dispensing device of claim 13, wherein the dissolvable product includes a bleaching agent or a chlorine releasing agent.

Date

**EXHIBIT** 

Page

Instructions: Use this form as an initial disclosure to the Law Department Preliminary patentability searches will be made based on the

contents of this disclosure, so answer the questions fully.

Use the back for additional space if necessary

i. Inventor(s):

Jerome J. Veltman, Stephen B. Leonard

:. Brief Description of Invention:

- A dual action toilet bowl rimblock device

. In the space below and/or on an attached sheet, describe: the essential elements or steps of your invention, using chemical names to describe formulation ingredients; the function of each essential element, component, or step; the optimum value and the upper and lower limits for each perminent parameter, such as temperature, time, pressure, pH, and concentration(s), amounts or ratios, amount of essential components; the effect of varying each parameter; and optional ingredients, elements or process steps, including amount and function. Also, list any possible substitution(s) for each essential element and use a drawing or flow sheet, if appropriate.

The device consists of a liquid and solid dispensing system that works in concert when mounted in the toilet bowl (on the rim) and flush water is washed over the unit. The device is made up of two independent dispensing mechanisms. One mechanism dispenses out a pre-determined amount of liquid product onto a capillary tray. This liquid product contains fragrance and surfactants that are necessary to provide toilet bowl freshening and foaming during the figsh. The other mechanism, which is suspended from under the liquid delivery part of the device, provides cleaning agents to tile toilet once the toilet flush water is applied. The benefits of the system (combining both the liquid and solid dispensing means) are its ability to deliver, effective cleaning actives to the bowl during a flush, as well as freshening and fragrancing. As second benefit is the ability to attach the solid dispensing system to an existing liquid UTR dispensing device.

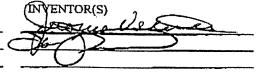
The liquid delivery system mechanism is currently under patent application globally. The addition of the solid dispensing mechanism provides the means by which efficacious levels of cleaning actives (bleach, hypechlorite, etc.) can be dispensed. The solid delivery system mechanism work by providing a container where a solid block/disc/pellet of active can be inserted. The block is contained within the housing that has several slots incorporated. When the toilet is flushed, flush water is directed into the container filling up the housing and allowing the block to mix with the water in the housing. The slots in the container allow excess water to be directed out. In addition to slots, a dispensing tube is positioned as a secondary drain mechanism metering out the water/active mixture. The metering out of the water/active mixture can be adjusted to deliver the mixture slowly after the flush is complete. This delay will allow for the active cleaners to remain in the bowl and provide cleaning power between flushes. After each flush, a certain amount of water is left within the housing to mix with the solid active, thereby making a concentrated pool of liquid for the next flush to dispense into the bowl during and after a flush.

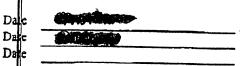
Limitations in chemical formulation delivery system dispensing have prevented the combining of the fragrance, surfactant and active cleaners into one formulation. The combining of the two formulations and a unique delivery system allows for efficacious amounts of cleaning actives, as well as fragrance and surfactants to be dispensed into the dowl during and after the flush. The key to effective cleaning is having active remain in the bowl after the flush.

List and attach copies of any patents, publications, technical reports, or supplier brochures which relate to the above invention.

See attached form.

ich person listed in #1 above must sign and date this form in the space below and have that signature witnessed by their manager.





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A-213 (Rev. 1-7/89)

